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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/054,558	01/22/2002	Steffen Hofacker	Mo6676/LeA 34,925	7309	
157 75	590 02/10/2004		EXAMINER		
BAYER POLYMERS LLC			BISSETT, MELANIE D		
100 BAYER ROAD PITTSBURGH, PA 15205			ART UNIT	PAPER NUMBER	
,	,		1711	8	
			DATE MARKED 02/10/200	DATE MAH ED. 02/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	41	Application No.	Applicant(s)	H_			
		10/054,558	HOFACKER ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Melanie D. Bissett	1711				
	The MAILING DATE of this communicati	on appears on the cover sheet w	ith the correspondence address				
THE   - External after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR SMAILING DATE OF THIS COMMUNICAT nsions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communica period for reply specified above is less than thirty (30) day period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, be reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	CFR 1.136(a). In no event, however, may a tion.  is, a reply within the statutory minimum of thir period will apply and will expire SIX (6) MOI y statute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed or	<b>1</b>	•				
2a)□	-	This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
5)□ 6)⊠ 7)□ 8)□ <b>Applicati</b> 9)□	Claim(s) 1-14 is/are pending in the application of the above claim(s) is/are well claim(s) is/are allowed.  Claim(s) 1-14 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction is on Papers  The specification is objected to by the Exthe drawing(s) filed on is/are: a)[	ithdrawn from consideration.  and/or election requirement.  aminer.	by the Examiner.				
ייייי	Applicant may not request that any objection						
11)	Replacement drawing sheet(s) including the The oath or declaration is objected to by	correction is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).				
Priority u	ınder 35 U.S.C. § 119						
a)[	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Rese the attached detailed Office action for	uments have been received. uments have been received in A e priority documents have been Bureau (PCT Rule 17.2(a)).	pplication No received in this National Stage				
2) Notic	t(s) se of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-9 mation Disclosure Statement(s) (PTO-1449 or PTO/ r No(s)/Mail Date <u>4.6</u> .	48) Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 				

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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 2. Claims 1-5, 10-12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by BASF as evidenced by Kubitza et al.
- 3. BASF teaches two-component coating compositions for aluminum substrates comprising a binder component and hardener component (abstract). The binder component must have at least one active hydrogen-containing compound, suggesting a resin reactive toward isocyanate groups (p. 4 line 32-p. 5 line 6). The hardener component comprises an isocyanate and a silane oligomer (p. 7 lines 2-4). Suitable isocyanates have preferred functionalities of 3-4 (p. 7 lines 24-32), where biurets of hexamethylene diisocyanate are most preferred (p. 7 lines 18-23). Kubitza teaches that conventional biurets of HDI have an isocyanate content of 23.5% by weight and a

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functionality of greater than 3 (col. 4 lines 55-62). Thus, the preferred use of such compounds in BASF suggests the applicant's claimed polyisocyanate. The silane oligomer is a reaction product of the isocyanate with a coupling agent, where the coupling agent fits the applicant's formula (I) of claims 2-5 (p. 9, all). The two-component coatings of BASF are preferably applied to untreated aluminum as a primer coating for other coatings (p. 12, lines 6-16), and the examples show the application of at least two organic coatings covering the primer coating (examples 3-4).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza and in view of Mager et al. (US 6,136,939) can be found on the applicant's Form PTO-1449.
- 6. BASF and Kubitza apply as above, teaching the application of a primer composition to aluminum substrates for automotive body panels (p. 11 lines 28-32). Although BASF teaches the use of top coatings on the primer layers, the reference does not teach the applicant's claimed modified inorganic layer. Mager teaches coating compositions suitable for plastics, metals, and glass, where the coatings comprise a carbosiloxane fitting the applicant's formula (III) (abstract). Exemplified compounds also

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fit the applicant's claim 9 limitation of the formula (col. 1 lines 56-62). The coatings are useful as anti-graffiti coatings on metallic substrates or on organic coatings, where the application to vehicles is noted (col. 2 lines 25-32). Thus, it is the examiner's position that it would have been prima facie obvious to use the coatings of Mager's invention as a top coating in BASF to provide anti-graffiti properties to the prepared articles.

- 7. Claims 6-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza and in view of Bayer. Bayer (CA 2,267,052) can be found on the applicant's Form PTO-1449.
- 8. BASF and Kubitza apply as above, teaching the application of a primer to various substrates, including metal, glass, and plastics (p. 11 lines 28-32). Although BASF teaches the use of top coatings on the primer layers, the reference does not teach the applicant's claimed modified inorganic layer. Bayer teaches coatings comprising a carbosiloxane fitting the applicant's formula (III) (p. 4 line 19-p. 5 line 11). Preferred compounds also fit the applicant's claim 9 limitation of formula (III) (p. 6 lines 4-14). The coatings are suitable for improving scratch resistance to substrates including polycarbonates and poly(methyl)methacrylates (p. 14 lines 10-14). Other substrates include metals and glass (p. 14 line 27-p. 15 line 2). Bayer specifically teaches that the adhesion of the coatings may be improved by priming the substrates and that the coatings serve as a top coating to base polyurethane coatings (p. 14 lines 16-25). Therefore, it is the examiner's position that it would have been prima facie obvious to use the coatings of Bayer as a top coating in the invention of BASF to improve the

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scratch resistance of the prepared articles. Also, since BASF teaches application to polymeric substrates, it is the examiner's position that it would have been prima facie obvious to apply the coatings to polycarbonate or poly(methyl)methacrylate substrates by Bayer's teaching to provide transparent articles with improved scratch resistance.

- 9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza et al. and in view of Mager et al. as applied to claims 6-9 above, and further in view of Bayer.
- BASF, Kubitza, and Mager apply as above, where both BASF and Mager teach 10. coating polymeric substrates (see Mager, col. 2 lines 25-32, stating that the coatings may be applied to plastics for improving mechanical strength). However, the references do not specify the polymeric substrates claimed by the applicant. Bayer teaches a similar top coating, where the coatings are known to improve the scratch resistance of polycarbonates and poly(methyl)methacrylates (p. 14 lines 10-14). Thus, it would have been prima facie obvious to apply the coatings of BASF and Mager to polycarbonates or poly(methyl)methacrylates to form transparent articles having improved mechanical strength and scratch resistance.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created 11. doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-7 and 10-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/054,386. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scopes of the claims have substantial overlap. Copending claim 12 is drawn to a substrate coated with a primer layer and a top coating, where the top coating comprises an inorganic coating, an organic coating, or an inorganic/organic hybrid coating. The primer comprises the same two-component binder as presently claimed by the applicant. Thus, the copending claims are entirely encompassed by the present claims.

Copending claims 2-11 teach the limitations of present claims 3-7 and 10-14. Because the additional limitations are taught as the invention of the copending application, it would have been prima facie obvious to combine the limitations and arrive at the present claims. Because of substantial overlap of claimed subject matter, it is the examiner's position that the present claims are unpatentable over the copending claims.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdb

James J. Seidleck Supervisory Patent Examiner Technology Conter 17: 2